## Assignment 6

Post Date: 05 June 2017 Due Date: 12 June 2017 Tutorial: 21 June 2017

Problem 1: Cycles 5 Points

Let G be a weighted (not necessarily planar) graph with arbitrary vertex-degrees. Give a method to find a maximum-weighted non-empty cycle in G.

 $\mathit{Hint}$ : Find a transformation of G into a 3-regular graph whose nodes can then be replaced by the gadgets from the lecture notes.